

NOVEMBER/DECEMBER 2024

**CBC53/FBC53 — PHYSIOLOGY AND  
NUTRITION**

Time : Three hours

Maximum : 75 marks

**SECTION A — (10 × 2 = 20 marks)**

Answer ALL the questions.

1. Recall the definition of systole.
2. Tell the two significance of Rh system.
3. What do you know about parietal cells?
4. Relate the components of intestinal juice with digestion.
5. How will you define chloride shift?
6. What is the normal GFR?
7. Mention the macronutrients of importance in humans.
8. List the essential fatty acids.
9. Spell the symptoms of beri beri.
10. Give the chief extracellular cation in the human body.



**SECTION B — (5 × 5 = 25 marks)**

Answer ALL the questions.

11. (a) Analyze the various blood groups.

Or

- (b) Categorize the various phases of ECG.

12. (a) Identify the role of bile salt in digestion.

Or

- (b) Examine the concept of intestinal digestion.

13. (a) Simplify the transport of O<sub>2</sub> and CO<sub>2</sub>.

Or

- (b) Illustrate the structure of nephron.

14. (a) Explain the composition of a balanced diet and its importance.

Or

- (b) Deduce the nutritional significance of carbohydrates.

15. (a) Categorize the sources, RDA and biochemical functions of vitamin D.

Or

- (b) Assess the sources and biochemical functions of folic acid.

**SECTION C — (3 × 10 = 30 marks)**

Answer any THREE questions.

16. Examine the stages of cardiac cycle.

17. Illustrate the structure of digestive system of man.

18. Assess the role of Hb in O<sub>2</sub> and CO<sub>2</sub> transport.

19. Evaluate the significance of PUFA.

20. Elaborate on the importance of calcium in our body.

